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NTC ORLANDO
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LETTER REGARDING FINAL ABANDONMENT OF WATER SUPPLY WELLS AT BUILDING 7107, 7111 AND 7149 AT MCCOY ANNEX WITH ATTACHMENTS NTC ORLANDO FL
10/13/1997
ABB ENVIRONMENTAL

FILE COPY

October 13, 1997

Document No.: 02530.036

Southern Division
Naval Facilities Engineering Command
ATTN: Mr. Wayne Hansel, Code 18B7
P.O. Box 190010
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

Subject: **Final Abandonment of Water Supply Wells**
McCoy Annex, Building 7107, 7111, and 7149
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Hansel:

ABB Environmental Services (ABB-ES) recommended to the Orlando Partnering Team (OPT) the abandonment of the water supply wells located on the McCoy Annex, Naval Training Center (NTC), Orlando, Florida. This recommendation was in accordance with Chapter 40C-3 of the Florida Administration Code (FAC) which states that water wells be abandoned upon placement in an "out-of-service" status. Water supply wells located at Buildings 7107, 7111, and 7149 in the McCoy Annex have been out-of-service and therefore had to be abandoned.

The OPT approved ABB-ES's recommendation to abandon the out-of-service water supply wells. ABB-ES prepared a procurement package and obtained competitive bids for the job. Custom Drilling Services, Inc. was awarded the bid based on cost and experience.

The work to be performed included the following:

- removal of the turbine pumps and surface equipment from each well head;
- use of a caliper log to determine well depth, cased interval, and open-hole irregularities (performed by St. John's River Water Management District);
- grout wells from bottom to surface, in accordance with the South Florida Water Management District's requirements; and
- demolish the pumphouses and bring sites to grade including sowing seed.

The work was completed in several phases. Because lubricating oil was found in the wells, a product recovery and groundwater sampling phase was added to the job. This letter report compiles this information and discusses procedures used to abandon these water supply wells.

ABB Environmental Services Inc.

1080 Woodcock Road, Suite 100
St. Paul Building
Orlando, Florida 32803

Tel. (407) 895-8845
Fax (407) 896-6150

PUMP REMOVAL

The removal of the turbine pumps and the pump hardware was carried out from April 30, 1997 through May 2, 1997. A boom truck was used with a cutting torch to dismantle the three turbine pumps and associated hardware. All pumps and hardware were inventoried and delivered to NTC Orlando, Defense Reutilization and Marketing Office (DRMO).

During pump removal at Buildings 7111 and 7149, lubricating oil was found in the wells. The source of the lubricating oil is believed to be the lubricating system of the turbine pumps. Details of the petroleum product thicknesses and recovery from the wells is discussed below.

PRODUCT RECOVERY AND GROUNDWATER SAMPLING

Free-product was discovered in the wells at Buildings 7111 and 7149 ranging in thickness from 8.79 to 12.03 feet. Attachment A contains correspondence to the State of Florida Department of Environmental Protection (FDEP) on June 4, 1997. These letters discuss the free-product recovery and groundwater sampling.

No free product was detected in the water supply well at Building 7107. On May 2, 1997, the water supply well at Building 7107 was sampled for the analysis of the Kerosene Analytical Group. The results of the sampling showed no contaminants above the laboratory standard detection limits.

On May 8, 1997, ABB-ES contracted with Southern Waste Services, Inc. to use enhanced vacuum extraction to recover free product from the water supply wells at Buildings 7111 and 7149. Small amounts of free-product (oil residue) that were not able to be extracted by enhanced vacuum extraction were recovered by using hydrophobic, oil absorbent socks.

When the recovery of the product was complete, a Grundfos Redi-Flo 2 submersible pump was used to purge approximately 55 gallons of water from each of the wells. Groundwater samples were then collected and analyzed using Chapter 62-770, Florida Administration Code (FAC) Kerosene Analytical Group. The well at Building 7149, which was sampled on May 22, 1997, showed no impact to groundwater above the Chapter 62-770, FAC cleanup target level.

The water supply well at Building 7111, sampled on May 21, 1997, showed benzene contamination above the Chapter 62-770, FAC cleanup target levels. Florida Department of Environmental Protection requested that the water supply well at Building 7111 be purged and sampled a second time. ABB-ES overdeveloped and sampled the water supply well in Building 7111. Laboratory analytical results showed that benzene levels decreased but still did not fall below the State's requirement of 1 μg/l. Attachment B contains the information regarding the overdevelopment, groundwater sampling, and laboratory analysis of the water supply well in Building 7111.
On July 14, 1997, in responce to FDEP's request, the water supply well at Building 7111 was overdeveloped again using enhanced vacuum extraction and resampled on July 15, 1997. Laboratory results showed benzene levels below the laboratory standard detection limit of 1.0 μg/l. Additional details can be found in Attachment C, which contains the letter written to the FDEP on July 24, 1997.

LOGGING OF THE WATER SUPPLY WELLS

The water supply wells located at Building 7107, 7111, and 7149 were logged by St. John's River Water Management District using a caliper log. Total depth of the wells as measured from land surface, depth of casing, and irregularities/cavities in the borehole (open-hole) below the casing were obtained at each well location. A copy of the logs and site maps are enclosed in Attachment D, which contains the letter written to Custom Drilling Services, Inc. on August 4, 1997.

NEAT CEMENT PLACEMENT (GROUTING)

The well abandonment was carried out by Southern Well Services, Inc. (a subcontractor to Custom Drilling Services, Inc.) on August 15, 1997 through August 17, 1997. The three water supply wells were grouted from the bottom up with Class A neat cement using tremie pipe. Attachment E contains the water well abandonment permits and the well completion forms filed with the South Florida Water Management District.

PUMPHOUSE DEMOLITION

The concrete block structures that housed the abandoned water supply wells were demolished on September 5 and 6, 1997. All construction debris was disposed of following local and State regulations. The eight-inch inside diameter (ID) casings were cut off one foot below ground surface and the area was backfilled with clean fill. The three locations were graded and sowed with grass seed.

CONCLUSIONS

After receiving approval from the FDEP, the water supply wells at Building 7107, 7111, and 7149 were successfully abandoned following the South Florida Water Management District's Guidelines. All free-product encountered was recovered and contaminant free groundwater samples were collected.

Should you have any questions or comments regarding this project, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

MA/JN/lak
Enclosure
cc: Lt. Gart Whipple (NTC) w/o attachment
Mark Zill (NTC) w/attachment
Nick Ugolini (SDIV) w/attachment
John Kaiser (ABB-ES) w/attachment
g:\users\shared\wellaban\report

ATTACHMENT A

June 4, 1997 Document No.: 8545.010

Mr. John Mitchell
Remedial Project Manager
State of Florida
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: **Request to Abandon Water Supply Well**
McCoy Annex, Building 7111
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Mitchell:

ABB Environmental Services (ABB-ES) recommended to the Orlando Partnering Team (OPT) the abandonment of the water supply wells located on the McCoy Annex, Naval Training Center (NTC), Orlando, Florida. This recommendation was in accordance with Chapter 40C-3 of the Florida Administration Code (FAC) which states that water wells be abandoned upon placement in an "out-of-service" status.

With approval from the OPT, ABB-ES procured well abandoning services to accomplish the work. On May 1, 1997, Custom Drilling Services, Inc. removed the turbine pump and column piping from the water supply well at Building 7111. The equipment which was removed from the eight-inch diameter well was coated with a petroleum product (lubricating oil).

ABB-ES measured the product thickness in the well using an oil/water interface probe. On May 2, 1997, the product thickness measured 8.79 feet. A sample of the free-product was collected for visual inspection using a disposable bailer. The product appeared to be lubricating oil associated with the lubrication of the turbine pump down hole. A 5-gallon bucket found inside Building 7111, labeled Chevron GST Oil 32, supports this theory. Attachment A contains the Discharge Reporting Form submitted by NTC Orlando Public Works Department to the Orange County Environmental Protection Department and the Florida Department of Environmental Protection (FDEP). Attachment B contains the Initial Remedial Action Notification Form which was submitted to the FDEP for review.

On May 8, 1997, Southern Waste Services, Inc. using enhanced vacuum extraction removed a total of 58 gallons of product/water mixture and transported it to the Howco facility in St. Petersburg, Florida. Attachment C contains the Non-hazardous Waste Manifest and Attachment D contains the Petroleum Contamination Initial Remedial Action Report Form.

On May 9, 1997, a measured product thickness of 0.03 feet remained in the well. Hydrophobic, oil absorbent socks were lowered into the well to soak up the remaining lubricating oil. Periodically, product thickness was measured and new absorbent socks were lowered into the well for lubricating oil removal. Table 1, in Attachment E, provides a record of the water levels and product thickness measured at the site.

On May 21, 1997, ABB-ES purged 55 gallons of groundwater from the water supply well with the use of a two-inch submersible pump. After purging, a groundwater sample was collected using a teflon bailer. The sample was transported to PC&B Environmental Laboratory Inc. for analysis using Chapter 62-770, FAC's Kerosene Analytical Group (KAG) which includes: U.S. Environmental Protection Agency (USEPA) Methods 601 (volatile organic halocarbons [VOH]), 602 (volatile organic aromatics [VOA] plus methyl tert-butyl ether), 610 (polynuclear aromatic hydrocarbons [PAH]), 504 (ethylene dibromide), 239.2 (total lead), and 418.1 (total recoverable petroleum hydrocarbons [TRPH]). Attachment F contains the laboratory analytical reports and chain-of-custody records for review.

The laboratory analytical results for the May 21, 1997 sampling event show 1.0 mg/l of TRPH and 2.8 µg/l of benzene. The TRPH value falls below the Chapter 62-770, FAC target cleanup level of 5.0 mg/l. The benzene value of 2.8 µg/l is above the Chapter 62-770 FAC target cleanup level, however, "No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites" (FDEP 1990), allows for sites with no potable wells within a 1/4 mile radius of the site in a G-II aquifer a guidance concentration of 50 µg/l. A potable well survey conducted during the preparation of the Contamination Assessment Report, for the McCoy Annex (1996) reveals that no potable wells are in use in the vicinity of the site. Based on the information provided in this letter report, ABB-ES recommends that the water supply well in Building 7111 be abandoned following the South Florida Water Management District's Guidelines.

Should you have any questions or comments regarding this well abandonment, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

MA/JN/lak
Enclosure

cc: Lt. G. Whipple (NTC) w/attachment
Wayne Hansel (SDIV) w/attachment
Nancy Rodriguez (EPA) w/attachment
Mark Zill (NTC) w/attachment
Barbara Nwokike (SDIV) w/attachment
Nick Ugolini (SDIV) w/attachment
John Kaiser (ABB-ES) w/attachment
File w/attachment

ATTACHMENT A

7/4-08545

5090
NTC 010E
May 2, 1997

CERTIFIED LETTER- RETURN RECEIPT REQUESTED
P-254-039-003

Orange County Environmental Protection Department
Storage Tank Compliance Section
2002 E. Michigan Street
Orlando, FL 32806

Gentlemen:

As required by the Florida Administrative Code, "Underground Storage Tank Systems", Chapter 62-761.820, the Naval Training Center (NTC), Orlando, is submitting a Discharge Reporting Form for a lube oil discharge at facility #7111 located on the Naval Training Center Annex. During removal of the water well pumps as part of proper closure, free product was discovered in the shaft. NTC's remidiation contractor has made arrangements to have the oil removed on May 5, 1997. When the oil has been removed, the contractor will do more sampling of the water. Mr. Mark S. Zill is available at (407) 646-4663 to respond to any questions.

Sincerely,

G. B. WHIPPLE
Lieutenant
CEC, U.S. Navy
Public Works Officer
By direction of
the Commander

Enclosure: (1) FDEP Discharge Reporting Form

Copy to:
(1) Mr. Manuel Alonso, ABB-ES, Orlando
(2) FDEP, Tallahassee

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form # 17-761.900(1)
Form Title Discharge Reporting Form
Effective Date December 10, 1990
DER Application No. _____ (Filled in by DER)

Discharge Reporting Form

Use this form to notify the Department of Environmental Regulation of:

1. Results of tank tightness testing that exceed allowable tolerances within ten days of receipt of test result.
2. Petroleum discharges exceeding 25 gallons on pervious surfaces as described in Section 17-761.460 F.A.C. within one working day of discovery.
3. Hazardous substance (CERCLA regulated), discharges exceeding applicable reportable quantities established in 17-761.460(2) F.A.C., within one working day of the discovery.
4. Within one working day of discovery of suspected releases confirmed by: (a) released regulated substances or pollutants discovered in the surrounding area, (b) unusual and unexplained storage system operating conditions, (c) monitoring results from a leak detection method or from a tank closure assessment that indicate a release may have occurred, or (d) manual tank gauging results for tanks of 550 gallons or less, exceeding ten gallons per weekly test or five gallons averaged over four consecutive weekly tests.

Mail to the local regulatory agency---

Orange County Environmental Protection Dept.
Storage Tank Compliance Section
2002 E. Michigan St.
Orlando, FL 32806

PLEASE PRINT OR TYPE
Complete all applicable blanks

1. DER Facility ID Number: _____ 2. Tank Number: _____ 3. Date: _____
4. Facility Name: Naval Training Center

   Facility Owner or Operator: Commander, Naval Training Center (CODE 010E)

   Facility Address: 1350 Grace Hopper Ave., Orlando, FL 32813-8405

   Telephone Number: (407) 646-4663 County: Orange

   Mailing Address: Same as Above
5. Date of receipt of test results or discovery: May 1, 1997 month/day/year
6. Method of initial discovery. (circle one only)
   A. Liquid detector (automatic or manual)
   B. Vapor detector (automatic or manual)
   C. Tightness test (underground tanks only).
   D. Emptying and Inspection.
   E. Inventory control.
   F. Vapor or visible signs of a discharge in the vicinity.
   (G.) Closure: of Water Well (explain)
   H. Other: _____
7. Estimated number of gallons discharged: Unknown
8. What part of storage system has leaked? (circle all that apply) A. Dispenser B. Pipe C. Fitting D. Tank E. Unknown
9. Type of regulated substance discharged. (circle one)
   A. leaded gasoline
   B. unleaded gasoline
   C. gasohol
   D. vehicular diesel
   F. aviation gas
   G. jet fuel
   L. used/waste oil
   M. diesel
   (O.) new/lube oil
   V. hazardous substance includes pesticides, ammonia, chlorine and derivatives (write in name or Chemical Abstract Service CAS number) _____
   Z. other (write in name) _____
10. Cause of leak. (circle all that apply)
    (A.) Unknown
    B. Split
    C. Loose connection
    D. Corrosion
    E. Puncture
    F. Installation failure
    G. Spill _____
    H. Overfill
    I. Other (specify) _____
11. Type of financial responsibility. (circle one)
    A. Third party insurance provided by the state insurance contractor
    B. Self-insurance pursuant to Chapter 17-769.500 F.A.C.
    (C.) Not applicable
    D. None
12. **To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.**

G. B. WHIPPLE
Printed Name of Owner, Operator or Authorized Representative

G. B. Whipple LT, CEC, USN PWO
Signature of Owner, Operator or Authorized Representative

ATTACHMENT B

May 5, 1997

Document No.: 8545.001

Mr. John Mitchell
Remedial Project Manager
State of Florida
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: **Initial Remedial Action Notification Form**
McCoy Annex, Building 7111
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Mitchell:

Enclosed for your review and approval is the Initial Remedial Action Notification Form for the above referenced facility.

Should you have any questions or comments regarding this IRA Notification Form, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

MA/JN/lak
Enclosure

cc: Nick Ugolini, Southern Division w/attachment
Mark Zill, NTC, Orlando w/attachment

g:\users\lkandt\wp51\cto107\ust\fdep\jm050597.wp

INITIAL REMEDIAL ACTION NOTIFICATION FORM

This notification provides written confirmation of initial remedial action (IRA) as required by Chapter 17-770.300(5) and (8), Florida Administrative Code. Notification must be within three working days of initiation of an IRA. The notification must be submitted to the appropriate contracted local program and/or:

Florida Department of Environmental Protection
Bureau of Waste Cleanup
Engineering Support Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-3935

Upon completion of the IRA program task, an Initial Remedial Aciton Report (or its equivalency) should be submitted for technical review.

I. **FACILITY NAME:** McCoy Annex, Building 7111

Facility Address: Naval Training Center, Orlando, Florida

DER Facility Number (if applicable): 488840202

Date IRA Initiated: 5/7/97 **Date IRA Completed:** 5/21/97

II. **FREE PRODUCT RECOVERY**

A. **Type(s) of Product Discharged:** Chevron GST Oil 32 (lubricating

B. **Quantity**

1. **Estimated Gallons Lost:** Unknown

C. **Method of Product Recovery:** Enhanced vacuum extraction by Southern Waste Services, Inc.

D. **Type of Discharge During Product Recovery:** None

E. **Type of Treatment, i.e., Oil/Water Separator: and Expected Effluent Quality from Any Discharge:** Offsite Howco Facility of St. Petersburg, Florida

F. **Quantity and Disposal of Recovered Product:** 22.87 gallons

III. SOIL EXCAVATION

A. Estimated Volume of Excessively Contaminated Soil Excavated in Cubic Yards: N/A

B. Estimated Dimensions of Excavation Including Depth of Excavation(s): N/A

C. Type(s) of Product in Soil: N/A

D. Type of Instrument and Method Used to Determine Excessive Soil Contamination: N/A

IV. ADDITIONAL COMMENTS: None

John Nash
Print Person Completing Form

5/5/97
Signature, Date

Geologist, ABB Environmental Services, Ir
Title, Affiliation

1080 Woodcock Rd. Suite 100 Orlando, FL 32803
Company Address

(407) 895-8845
Phone Number

ATTACHMENT C

John Nash

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. FLB17 0.0.24733 | Manifest Document No. | 2. Page 1 of | TM98-0119

3. Generator's Name and Mailing Address
COMMANDER NAVAL TRAINING CENTER (CODE 0108)
1350 GENE HOOVER AVE
ORLANDO FL 32813-8405
4. Generator's Phone 407 646-4463

5. Transporter 1 Company Name: SOUTHERN WASTE SERVICES | 6. US EPA ID Number: FLD 000997744

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address
HOWCO 843 43RD ST S.
ST PETERSBURG FL. 33711
10. US EPA ID Number: FLD 152762767

A. Transporter's Phone 800 881-9369
B. Transporter's Phone
C. Facility's Phone 813-323-0813

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. VIRGIN OIL Non-LUBRICATING / FOR RECYCLING	1	TC	117.	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above
For RECYCLING

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE # 800-852-8878
116 Gals. Charge for Decon

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
MARK S. BELL	Mark S Bell	10	10	97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TROY MCKENNA		10	08	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 18.

Printed/Typed Name	Signature	Month	Day	Year
LEWIS SPARKS		10	10	97

GENERATOR — TRANSPORTER — FACILITY

ATTACHMENT D

PETROLEUM CONTAMINATION
INITIAL REMEDIAL ACTION
REPORT FORM

An Initial Remedial Action report, detailing the initial remedial action (IRA), should be prepared to satisfy the requirements of Chapters 17-770.630(1)14; 17-773.500(1)(a)4; and 17-773.500(2)(a)4, Florida Administrative Code, (FAC). This form may be used for the IRA report. Additional pages may be necessary in order to properly document the IRA in detail. Failure to provide complete information may result in delays in technical reviews and in reimbursement of task. This report format (or a similar completed report detailing the IRA activities) should be sent to the appropriate contracted local program office and to:

Florida Department of Environmental Protection
Bureau of Waste Cleanup
Engineering Support Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-3935

I. **FACILITY NAME:** McCoy Annex, Building 7111

Facility Address: Naval Training Center, Orlando, Florida

DER Facility Number (if applicable): 488840202

Date IRA Initiated: 5/8/97 **Date IRA Completed:** 5/20/97

II. **FREE PRODUCT RECOVERY**

A. **Type(s) of Product Discharged:** Lubricating Oil

B. Quantity

1. **Estimated Gallons Lost:** 22.87 gallons
2. **Gallons Recovered:** 58 gallons oil/groundwater **through** 5/20/97 (date)
3. **Attach Exhibit Indicating Amount of Product Recovered, Dates and Cumulative Totals.**

C. **Attach a Scaled Site Plan, Indicating the Locations and Product Thickness in Wells, Boreholes, Excavations, or Utility Conduits and Wells Utilized for Recovery of Free Product.**

D. **Method of Product Recovery:** enhanced vacuum extraction

E. Type of Discharge During Product Recovery: None

F. Type of Treatment, i.e., Oil/Water Separator: Southern Waste Services transported waste to Howco Facility of St. Petersburg, Florida.

G. Attach Written Proof of Proper Disposal of Recovered Product: See Attachment

III. SOIL EXCAVATION

NOTE: Soil shall be defined as excessively contaminated using the procedure stated in Chapter 17-770.200(2), FAC. Representative soil sampling shall be performed as close to the time of excavation as possible, but at no time shall exceed three (3) months prior to the start of excavation. Stockpiled soils greater than thirty (30) days on site waiting for treatment and disposal, must be re-sampled immediately prior to disposal to assure soils are still excessively contaminated. **NOTE:** See PCR-27 guideline for sites eligible for reimbursement.

If soil sampling data indicates that the amount of soil that is excessively contaminated exceeds 1500 cubic yards, treatment of all excessively contaminated soil at the site shall be addressed in a remedial action plan, and no soil IRA activities shall be performed except for the removal of soils in the immediate vicinity of the tanks.

Only soil above the ambient water table at the time of excavation can be considered as excessively contaminated soil.

Unless the established weight per unit volume of 1.4 tons/cubic yard (as referenced in FAC Rule 17-775) is used for the excavated soil, the weight per unit volume must be determined by a field test (in which an accurately measured volume of soil is weighed) at the time of excavation.

A. Actual Volume of Excessively Contaminated Soil Excavated in Cubic Yards: NA

Dimensions of Excavation Including Depth of Excavation(s): NA

NOTE: Attach written proof from the Department in the form of an Alternate Procedure Approval Order authorizing excavating over 1500 cubic yards if applicable. Authorization must be received prior to the excavation of soils.

B. Type(s) of Product in Soil: NA

C. Depth (ft) to Groundwater at the Time of Excavation(s): NA

D. Did Dewatering (i.e., groundwater depression) Occur at Time of Excavation?: NA

E. Type of Instrument and Method Used to Determine Excessive Soil Contamination: NA

F. **Attach** a table that compares the OVA-FID readings taken with charcoal filter verses readings without filter. Include vertical depths for each sample.

G. Using the OVA procedure for defining excessively contaminated soil as referenced in Rule 17-770.200(2), FAC, include a scaled site plan with the information listed below:

1. Location of excavation, old and new tank farm, dispensers, and product lines, and all soil samples. The corresponding OVA-FID readings for each soil sample (with charcoal filter and without) and its depth must be given.

2. **Soil Sampling Procedure is as follows:**

Start sampling in a location where it is suspected that excessively contaminated soil exists. Sample from the first soil boring outward in a grid pattern, at five (5) to ten (10) foot intervals, until the perimeter of the excessively contaminated soil plume is defined. Vertical sampling should be performed starting approximately at the initial area of contamination or surface and continued at three (3) foot intervals, or fraction thereof, until a depth approximately one (1) foot above the water table is reached.

H. Copies of Laboratory Analyses for Pre Treatment Soil Samples as Required in Chapter 17-775.410(3), Table II, FAC Must be **Attached.**

I. Were Tanks Replaced at this Site? If Yes, Indicate the Number, Size, and Location of New Tank Farm: NA

IV. SOIL TREATMENT AND DISPOSAL

A. Method of Treatment of Excessively Contaminated Soil: NA

B. For Off Site Treatment and Disposal at Permitted STTF, Land Farms, or Landfills Attach Documentation From the Treatment Facility Which Confirms the Weight or Volume of Soil Treated and Date Received. **NOTE:** See PCR-19 guideline for treatment at out-of-state facilities.

For Other Treatment and Disposal Methods (i.e. On-Site Land Farming, Bioremediation), **Attach** Post Treatment Laboratory Analyses for Each 250-300 Cubic Yards of Treated Soil in Accordance With Chapter 17-775.400 and the "Guidelines for Assessment and Remediation of Petroleum Contaminated Soils", Most Current Revision.

For Mobile Thermal Treatment Units, Attach Laboratory Analysis per Chapter 17-775(5), FAC.

C. Method of Disposal of Contaminated Soil and Indicate Recipient and Address: NA

V. ADDITIONAL COMMENTS: None

John Nash
Print Person Completing Form

John Nash 6/4/97
Signature, Date

Geologist, ABB Environmental Serv.
Title, Affiliation

1080 Woodcock Rd., Suite 100, Orlando, FL
Company Mailing Address

(407) 895-8845
Phone Number

ATTACHMENT E

TABLE 1
WATER SUPPLY WELL ABANDONMENT
Building 7111, McCoy Annex
Naval Training Center
Orlando, Florida

Date	Depth To Product (feet BTOC)	Depth To Water (feet BTOC)	Thickness Of Product (feet)	Comments
5/2/97	46.46	55.25	8.79	extracted product with enhanced vacuum
5/9/97	48.65	48.68	0.03	installed absorbent sock
5/13/97	NA	48.40	0.00	replaced absorbent sock
5/16/97	NA	48.55	0.00	visual inspection, no sheen
5/21/97	NA	48.61	0.00	collected sample for laboratory analysis, no sheen

Note: BTOC = below top of casing.
NA = not applicable.

ATTACHMENT F

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

05-30-1997

John Kaiser
ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Dear John Kaiser:

Enclosed are the results of the analysis of your samples received 05/22/1997.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as wet weight. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Declan Cowley
Laboratory Director

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Contact : John Kaiser
Phone : (407) 895-8845

Laboratory Reference Number : 97050154

Project Name : NTC Orlando
Project Number : 8545-58
Sample temperature at time of receipt: 4 degrees C

Chain of Custody : 6214

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled
97050154-1	Water	073GP101/7111 PW-1	RUN	05/21/1997 11:34
97050154-2	Water	074GP101/7149 PW-1	RUN	05/22/1997 09:32

Number	Parameter	Description
2	Group Test	Kerosene Analytical Group for FAC 17-770
2	EPA 418.1/9073	TRPH by IR

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Halogenated Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 601/8010

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Bromobenzene	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U
2-Chloroethyl vinyl ether	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U
Dichlorodifluoromethane	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U
Methylene chloride	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :

Quality Control Report for Spike/Spike Duplicate Analysis

Halogenated Volatile Organics

Matrix: Water
Lab Sample ID: 9705153-1
QC Batch ID: 9705MS1048
Spike Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 601
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Carbon tetrachloride	50.0	0.0	43.0	86	40.0	80	7
Chlorobenzene	50.0	0.0	49.0	98	46.0	92	6
1,4-Dichlorobenzene	50.0	0.0	47.0	94	47.0	94	0
1,1-Dichloroethene	50.0	0.0	58.0	116	53.0	106	9
Trichloroethene	50.0	0.0	53.0	106	48.0	96	10

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Carbon tetrachloride	65	133	11
Chlorobenzene	75	122	12
1,4-Dichlorobenzene	60	137	13
1,1-Dichloroethene	64	139	12
Trichloroethene	69	131	10

Quality Control Report for LCS Analysis

Halogenated Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9705MS1048
LCS Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 601
Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Carbon tetrachloride	20.0	18.0	90	70	120
Chlorobenzene	20.0	20.0	100	70	120
1,4-Dichlorobenzene	20.0	24.0	120	70	120
1,1-Dichloroethene	20.0	22.0	110	70	120
Trichloroethene	20.0	20.0	100	70	120

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210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Aromatic Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 602/8020

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Benzene	2.8	1.0 U
Chlorobenzene	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U
MTBE	5.0 U	5.0 U
Toluene	1.0 U	2.4
m & p-Xylenes	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

Reviewed by :

Quality Control Report for Spike/Spike Duplicate Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: 9705153-1
QC Batch ID: 9705MS1048
Spike Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 602
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Benzene	50.0	0.0	53.0	106	49.0	98	8
Ethylbenzene	50.0	0.0	49.0	98	45.0	90	9
MTBE	50.0	0.0	63.0	126	65.0	130	3
Toluene	50.0	0.0	50.0	100	46.0	92	8
m & p-Xylenes	100.0	0.0	91.0	91	93.0	93	2
o-Xylene	50.0	0.0	52.0	104	49.0	98	6

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	67	138	12
Ethylbenzene	67	128	10
MTBE	54	156	16
Toluene	67	129	10
m & p-Xylenes	65	133	12
o-Xylene	67	130	10

Quality Control Report for LCS Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9705MS1048
LCS Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 602
Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20.0	22.0	110	61	160
Ethylbenzene	20.0	17.0	85	70	137
MTBE	20.0	23.0	115	40	166
Toluene	20.0	21.0	105	61	140
m & p-Xylenes	40.0	34.0	85	44	150
o-Xylene	20.0	22.0	110	59	140

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Polynuclear Aromatic Hydrocarb

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 610/8100

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	No	No
Dilution Factor	1	1
Result Units	ug/l	ug/l
Acenaphthene	5 U	5 U
Acenaphthylene	5 U	5 U
Anthracene	5 U	5 U
Benzo(a)anthracene	5 U	5 U
Benzo(a)pyrene	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U
Benzo(ghi)perylene	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U
Chrysene	5 U	5 U
Dibenzo(ah)anthracene	5 U	5 U
Fluoranthene	5 U	5 U
Fluorene	5 U	5 U
Indeno(123-cd)pyrene	5 U	5 U
Naphthalene	5 U	5 U
1-Methyl naphthalene	5 U	5 U
2-Methyl naphthalene	5 U	5 U
Phenanthrene	5 U	5 U
Pyrene	5 U	5 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

Reviewed by :

Quality Control Report for Spike Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water
Lab Sample ID: 9705150-1
QC Batch ID: 9705PAH064
Spike Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 610
Analyst: KN

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Acenaphthene	50	0	35	70	49	115
Acenaphthylene	50	0	32	64	42	113
Anthracene	50	0	41	82	53	126
Benzo(a)anthracene	50	0	37	74	37	122
Benzo(a)pyrene	50	0	39	78	40	120
Benzo(b)fluoranthene	50	0	41	82	47	123
Benzo(ghi)perylene	50	0	38	76	33	122
Benzo(k)fluoranthene	50	0	41	82	47	123
Chrysene	50	0	37	74	49	120
Dibenzo(ah)anthracene	50	0	40	80	32	124
Fluoranthene	50	0	35	70	46	121
Fluorene	50	0	35	70	41	117
Indeno(123-cd)pyrene	50	0	40	80	31	123
Naphthalene	50	0	30	60	38	107
Phenanthrene	50	0	36	72	43	119
Pyrene	50	0	36	72	49	119

Quality Control Report for LCS Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9705PAH064
LCS Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 610
Analyst: KN

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Acenaphthene	50	38	76	70	120
Acenaphthylene	50	35	70	70	120
Anthracene	50	48	96	70	120
Benzo(a)anthracene	50	39	78	70	120
Benzo(a)pyrene	50	41	82	70	120
Benzo(b)fluoranthene	50	44	88	70	120
Benzo(ghi)perylene	50	39	78	70	120
Benzo(k)fluoranthene	50	43	86	70	120
Chrysene	50	39	78	70	120
Dibenzo(ah)anthracene	50	41	82	70	120
Fluoranthene	50	38	76	70	120
Fluorene	50	37	74	70	120
Indeno(123-cd)pyrene	50	41	82	70	120
Naphthalene	50	37	74	70	120
Phenanthrene	50	35	70	70	120
Pyrene	50	38	76	70	120

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PHONE: 407-359-7194
FAX: 359-7197

EDB/DBCP

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	No	No
Dilution Factor	1	1
Result Units	ug/l	ug/l
Ethylene dibromide (EDB)	0.02 U	0.02 U
1,2-Dibromo-3-chloropropane	0.1 U	0.1 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : 

Quality Control Report for Spike Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: 9705148-1
QC Batch ID: 9705EDB007
Spike Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 504
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Ethylene dibromide (EDB)	1.00	0.00	0.99	99	55	133
1,2-Dibromo-3-chloropropane	1.0	0.0	1.0	100	46	133

Quality Control Report for LCS Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9705EDB007
LCS Units: ug/l

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997
Method: EPA 504
Analyst: ELA

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Ethylene dibromide (EDB)	1.00	1.10	110	75	120
1,2-Dibromo-3-chloropropane	1.0	1.1	107	75	120

PC&B Environmental Laboratories, Inc.
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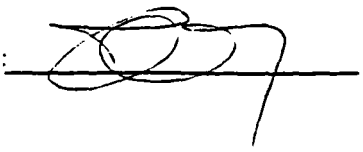
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997

Lab Reference Number			97050154-1	97050154-2
Client Sample ID			073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled			05/21/1997	05/22/1997
Sample Matrix (as Received)			Water	Water
EPA 418.1/9073	TRPH	mg/l	1.0	1.0 U
EPA 6010	Lead, Total	ug/l	3 U	3 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

Reviewed by : 

Quality Control Report for Spike Analysis

INORGANICS

Matrix: Water
Lab Sample ID: 9705154-2

Analysis Date: 05/28/1997
Preparation Date: 05/28/1997

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
TRPH	10.0 mg/l	0.0	10.8	108	85	111

Quality Control Report for LCS Analysis

INORGANICS

Matrix: Water
Lab Sample ID: LCS

Analysis Date: 05/28/1997
Preparation Date: 05/28/1997

Analyte	LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
TRPH	10.0 mg/l	0.0	10.0	100	70	120

Quality Control Report for Spike Analysis

INORGANICS

Matrix: Water
Lab Sample ID: 9705153-1

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Lead, Total	100 ug/l	0	102	102	66	124

Quality Control Report for LCS Analysis

INORGANICS

Matrix: Water
Lab Sample ID: LCS

Analysis Date: 05/23/1997
Preparation Date: 05/23/1997

Analyte	LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Lead, Total	100 ug/l	0	103	103	70	120

№ 6214

PC&B Laboratories, Inc.

210 Park Road, Oviedo, Fl 32765
407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: 9705154

Date: 5-22-97 Page 1 of 1

COMPANY ABB-ENS
ADDRESS 1080 WOODCOCK ROAD
ORLANDO, FL 32803
SAMPLED BY SCOTT DONELICK & JOHN NASH
SIGN [signature] PHONE NO: 895-8845

#	SAMPLE ID.	DATE/TIME	MATRIX	EPA 601/602	EPA 504	EPA 610	EPA 239.2 (Pb)	EPA 418.1	NUMBER OF CONTAINERS
1	0736P101/7111 PW-1	5-21-97 1134	H_2O	2	2	1	1	1	7
2	0746P101/7149 PW-1	5-22-97 0932	H_2O	2	2	1	1	1	7
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									

ANALYSIS REQUEST

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	5-22-97	1: [signature]	5/23/97 1315
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

PROJECT INFORMATION

PROJECT NAME: NTC Orlando
PROJECT #: 8545-58
SITE ADDRESS: BUILDINGS 7149, 7111
PROJECT MANAGER: John Kaiser
INVOICE TO: (IF DIFFERENT FROM ABOVE) ANNI LUCENA KANOT

SAMPLE RECEIPT

Total No. of Containers
Chain of Custody Seals
Rec'd Good Condition/Cold
PO#:
SHIPPED VIA:

June 17, 1997 Document No.: 8545.017

Mr. John Mitchell
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Resampling of Water Supply Well
McCoy Annex, Building 7111
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Mitchell:

In response to our conversation on June 11, 1997, the water supply well at Building 7111 was resampled. On June 13, 1997, ABB-ES purged an additional 140 gallons of groundwater from the well. After purging, a groundwater sample was collected using a teflon bailer. The sample was transported to PC&B Environmental Laboratory Inc. for analysis using U.S. Environmental Protection Agency (USEPA) Method 602 (volatile organic aromatics [VOA] plus methyl tert-butyl ether). Attachment A contains the laboratory analytical report and chain-of-custody record for review.

The laboratory analytical results for the June 13, 1997 sampling event show 1.5 µg/l of benzene. The benzene value of 1.5 µg/l is below the 2.8 µg/l of benzene reported for the May 21, 1997 sampling event. All other EPA Method 602 parameters were reported below laboratory standard detection limits. Based on these sampling results, ABB-ES recommends that the water supply well in Building 7111 be abandoned following the South Florida Water Management District's Guidelines.

Should you have any questions or comments regarding this well abandonment, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

MA/JN/lak
Enclosure
cc: Lt. G. Whipple, NTC, Orlando
W. Hansel, SouthDiv
N. Rodriguez, USEPA Region IV
M. Zill, NTC, Orlando
B. Nwokike, SouthDiv
N. Ugolini, SouthDiv
J. Kaiser, ABB-ES
File
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ABB Environmental Services Inc.

1080 Woodcock Road, Suite 100
St. Paul Building
Orlando, Florida 32803

Tel. (407) 895-8845
Fax (407) 896-6150

ATTACHMENT A

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

COPY

06-17-1997

John Kaiser
ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Dear John Kaiser:

Enclosed are the results of the analysis of your samples received 06/13/1997.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as wet weight. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Declan Cowley
Laboratory Director

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

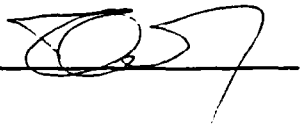
Aromatic Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 06/13/1997
ANALYTICAL PROTOCOL: EPA 602/8020

Lab Reference Number	97060096-1
Client Sample ID	073GP102/711
Date Sampled	06/13/1997
Date Extracted	06/13/1997
Date Analyzed	06/13/1997
Sample Matrix (as Received)	Water
Analysis Confirmed	GCMS
Dilution Factor	1
Result Units	ug/l
Benzene	1.5
Chlorobenzene	1.0 U
1,2-Dichlorobenzene	1.0 U
1,3-Dichlorobenzene	1.0 U
1,4-Dichlorobenzene	1.0 U
Ethylbenzene	1.0 U
MTBE	5.0 U
Toluene	1.0 U
m & p-Xylenes	1.0 U
o-Xylene	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : 

Quality Control Report for Spike/Spike Duplicate Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: 9706089-4
QC Batch ID: 9706MS1019
Spike Units: ug/l

Analysis Date: 06/13/1997
Preparation Date: 06/13/1997
Method: EPA 602
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Benzene	50.0	0.0	50.0	100	49.0	98	2
Ethylbenzene	50.0	0.0	45.0	90	47.0	94	4
MTBE	50.0	0.0	54.0	108	58.0	116	7
Toluene	50.0	0.0	51.0	102	52.0	104	2
m & p-Xylenes	100.0	0.0	88.0	88	88.0	88	0
o-Xylene	50.0	0.0	48.0	96	49.0	98	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	56	149	15
Ethylbenzene	59	137	15
MTBE	47	161	15
Toluene	55	142	15
m & p-Xylenes	55	141	15
o-Xylene	61	137	15

Quality Control Report for LCS Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9706MS1019
LCS Units: ug/l

Analysis Date: 06/13/1997
Preparation Date: 06/13/1997
Method: EPA 602
Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20.0	18.0	90	65	135
Ethylbenzene	20.0	17.0	85	61	134
MTBE	20.0	19.0	95	61	145
Toluene	20.0	20.0	100	62	134
m & p-Xylenes	40.0	33.0	83	60	135
o-Xylene	20.0	20.0	100	65	135

№ [illegible]

PC&B Laboratories, Inc.

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407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: 9706096

Date: 6-13-97 Page 1 of 1

COMPANY ABB-ES
ADDRESS 1080 Woodcock Road
Orlando FL 32803
SAMPLED BY Scott Dowelik
SIGN [signature] PHONE NO: 895-8845

#	SAMPLE ID.	DATE/TIME	MATRIX	ANALYSIS REQUEST: EPA 602	NUMBER OF CONTAINERS
1	5736P102/7111 MW-1	6-13-97/1030	H_2O	2	2
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	6/13/97 1500	1: [signature]	6/13/97 1500
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

PROJECT INFORMATION

PROJECT NAME: NTC Orlando
PROJECT #: 8545-58
SITE ADDRESS: BUILDING 7111
PROJECT MANAGER: John Kaiser

SAMPLE RECEIPT

Total No. of Containers
Chain of Custody Seals
Rec'd Good Condition/Cold
PO#:
SHIPPED VIA

INVOICE TO: (IF DIFFERENT FROM ABOVE) Attn: Lorena Kondt

ATTACHMENT C

ABB

July 24, 1997 Document No.: 08545.023

Mr. John Mitchell
Remedial Project Manager
State of Florida
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: **Notification of Water Supply Well Abandonment**
McCoy Annex, Building 7107, 7111, and 7149
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Mitchell:

In response to your letter issued June 26, 1997, the water supply well at Building 7111 was overdeveloped and resampled. On July 14, 1997, a total of 1000 gallons of petroleum impacted water was overdeveloped using enhanced vacuum extraction by Southern Waste Services, Inc. and transported to the Howco facility in St. Petersburg, Florida for disposal. Attachment A contains the Non-hazardous Waste Manifest. Following overdevelopment of the well, a groundwater sample was collected on July 15, 1997, using a teflon bailer. The groundwater sample was transported to PC&B Environmental Laboratory Inc. for analysis using U.S. Environmental Protection Agency (USEPA) Method 602 (volatile organic aromatics [VOA] plus methyl tert-butyl ether). Attachment B contains the laboratory analytical report and chain-of-custody record for review.

The laboratory analytical results for the July 15, 1997 sampling event show benzene below the laboratory standard detection limit of 1.0 $\mu g/\ell$. Based on these sampling results and our conversation on July 18, 1997, ABB-ES recommends that the water supply well in Building 7111 be abandoned following the South Florida Water Management District's Guidelines. Along with this water supply well, the water supply wells in Building 7107 and Building 7149 will also be abandoned.

Should you have any questions or comments regarding this well abandonment, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

ABB Environmental Services Inc.

1080 Woodcock Road, Suite 100
St. Paul Building
Orlando, Florida 32803

Tel. (407) 895-8845
Fax (407) 896-6150

MA/JN/lak
Enclosure

cc: Wayne Hansel, Southern Division
Lt. Gary Whipple, NTC, Orlando
Mark Zill, NTC, Orlando
Nick Ugolini, Southern Division
Barbara Nwokike, Southern Division
Nancy Rodriguez, USEPA, Region IV
John Kaiser, ABB-ES
File

g:\users\shared\wellaban\final.wp

ATTACHMENT A

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: FL8170024733

Manifest Document No.:

2. Page 1 of

5J970370

3. Generator's Name and Mailing Address: COMMANDER NAVAL TRAINING CENTER (CODE OICE) 1350 GRACE HOPPER AVE ORLANDO FL 32813-8405 ATTN MARK ZILL

4. Generator's Phone (407) 646-4663 AFTER HOURS 407 646-4501

5. Transporter 1 Company Name: Southern Waste Service

6. US EPA ID Number: FL0000996744

7. Transporter 2 Company Name:

8. US EPA ID Number:

9. Designated Facility Name and Site Address: HOWCO 843 43RD ST. S ST. PETERSBURG FL 33711

10. US EPA ID Number: FLD152762767

A. Transporter's Phone 813-546-6193

B. Transporter's Phone

C. Facility's Phone 813-323-0818

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. PETROLEUM CONTACT WATER	001	TT	03000	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGANCY PHONE# 1-800-881-8369

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Mark S Zill NTC OICE	[signature]	07	14	9[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
LARRY CARTER	[signature]	07	14	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

ATTACHMENT B

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

07-21-1997

John Kaiser
ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Dear John Kaiser:

Enclosed are the results of the analysis of your samples received 07/16/1997.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as wet weight. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Declan Cowley
Laboratory Director

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Contact : John Kaiser
Phone : (407) 895-8845

Laboratory Reference Number : 97070132

Project Name : NTC Orlando
Project Number : 8545-58
Sample temperature at time of receipt: 2 degrees C

Chain of Custody : 3441

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled
97070132-1	Water	073GP103/7111 PW-1	RUN	07/15/1997 13:40

Number	Parameter	Description
1	EPA 602/8020	Aromatic Volatile Organics

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Aromatic Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 07/16/1997
ANALYTICAL PROTOCOL: EPA 602/8020

Lab Reference Number	97070132-1
Client Sample ID	073GP103/7111 PW-1
Date Sampled	07/15/1997
Date Extracted	07/17/1997
Date Analyzed	07/17/1997
Sample Matrix (as Received)	Water
Analysis Confirmed	No
Dilution Factor	1
Result Units	ug/l
Benzene	1.0 U
Chlorobenzene	1.0 U
1,2-Dichlorobenzene	1.0 U
1,3-Dichlorobenzene	1.0 U
1,4-Dichlorobenzene	1.0 U
Ethylbenzene	1.0 U
MTBE	5.0 U
Toluene	1.0 U
m & p-Xylenes	1.0 U
o-Xylene	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :

Quality Control Report for Spike Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: 97070146-2
QC Batch ID: 9707GC4039
Spike Units: ug/l

Analysis Date: 07/17/1997
Preparation Date: 07/17/1997
Method: EPA 602
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20.0	0.0	19.0	95	56	149
Ethylbenzene	20.0	0.0	20.0	100	59	137
MTBE	20.0	0.0	17.0	85	47	161
Toluene	20.0	0.0	19.0	95	55	142
o-Xylene	20.0	0.0	18.0	90	61	137

Quality Control Report for LCS Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9707GC4039
LCS Units: ug/l

Analysis Date: 07/17/1997
Preparation Date: 07/17/1997
Method: EPA 602
Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20.0	21.0	105	65	135
Ethylbenzene	20.0	22.0	110	61	134
MTBE	20.0	19.0	95	61	145
Toluene	20.0	21.0	105	62	134
o-Xylene	20.0	20.0	100	65	135

№ 3441

PC&B Laboratories, Inc.

210 Park Road, Oviedo, Fl 32765
407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: 9707132

Date: 7-15-97 Page 1 of 1

COMPANY ABB-ES
ADDRESS 1080 Woodcock Rd.
Orlando, FL 32803
SAMPLED BY Scott Donellick
SIGN ~~Scott Donellick~~ PHONE NO: 895-8845

#	SAMPLE ID.	DATE/TIME	MATRIX	ANALYSIS REQUEST: EPA 602	NUMBER OF CONTAINERS
1	0736-P103/7111 PW-1	~~0736-P103~~ 7/15/97 1340	W	2	2
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Scott Donellick	7-16-97 1100	1: DBennett	7/16/97 800
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

PROJECT INFORMATION

PROJECT NAME: NTC Orlando
PROJECT #: 8545-58
SITE ADDRESS: Building 7111
PROJECT MANAGER: John Kaiser
INVOICE TO: (IF DIFFERENT FROM ABOVE) ATTN. Lorena Kandt

SAMPLE RECEIPT

Total No. of Containers
Chain of Custody Seals
Rec'd Good Condition/Cold
PO#:
SHIPPED VIA:

ATTACHMENT D

ABB

August 4, 1997 Document No.: 8545.025

Mr. Mike Johnson
Custom Drilling Services, Inc.
330 G Winston Creek Parkway
Lakeland, Florida 33810

Subject: **Additional Details for Wells at**
McCoy Annex, Buildings 7107, 7111, and 7149
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Johnson:

The water supply wells located at Building 7107, 7111, and 7149 are ready to be abandoned. I have enclosed the following information at your request.

The facility address is as follows:

Buildings 7107, 7111 and 7149, McCoy Annex
c/o Naval Training Center
1350 Grace Hopper Avenue
Orlando, Florida 32813
Attn: Mark Zill

The following table gives the locations of the wells.

WELL ID	BUILDING NUMBER	SECTION	TOWNSHIP	RANGE
WW-1 (OR0655)	7107	32	23	30
WW-2 (OR0654)	7111	32	23	30
WW-5 (OR0653)	7149	32	23	30
Pine Castle Quadrangle				

Enclosed are the site maps and an additional copy of the caliper logs. Please contact ABB-ES by the end of the week with the date that the well abandonment will begin.

Should you have any questions or comments regarding this well abandonment, please contact the undersigned at (407) 895-8845.

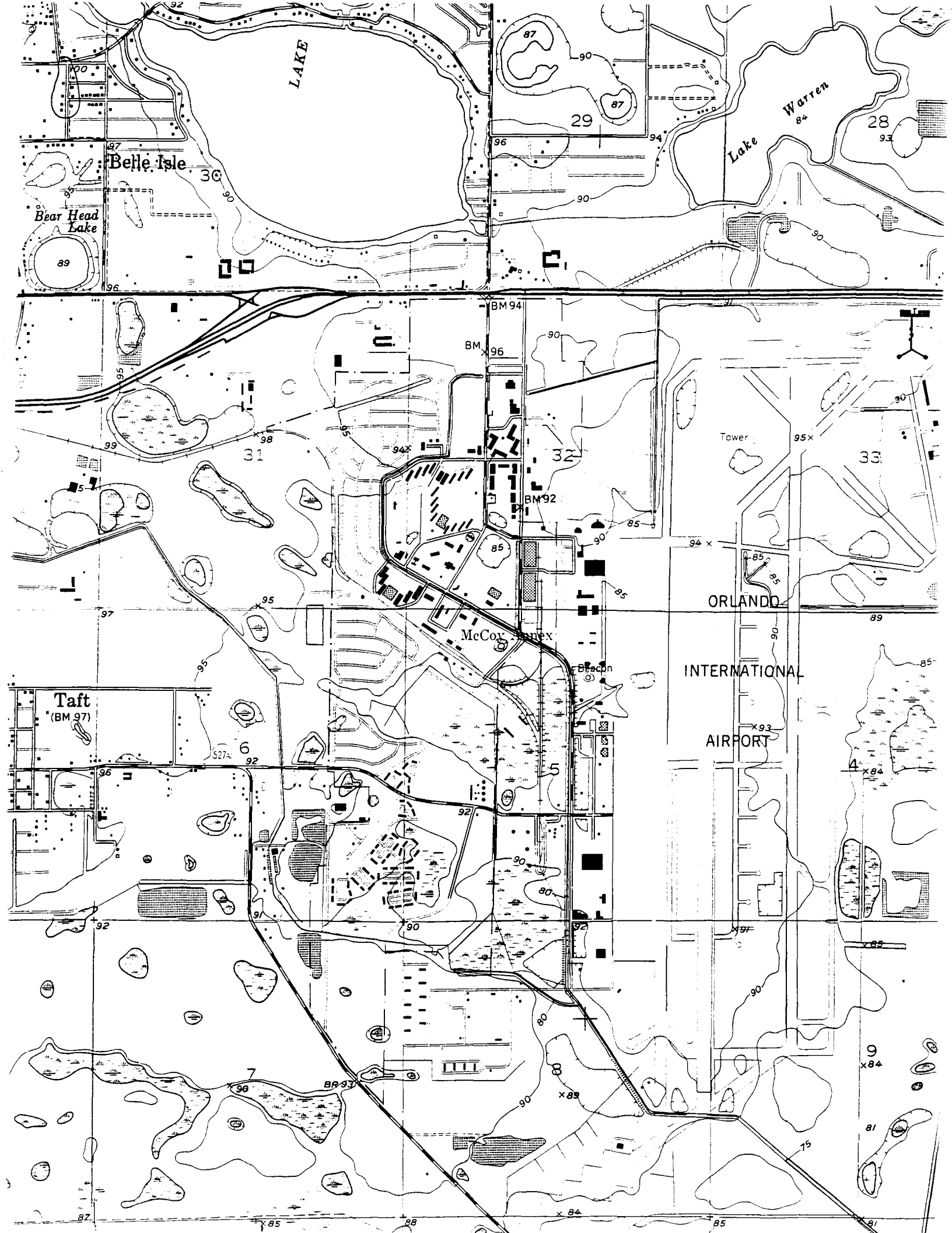
Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.

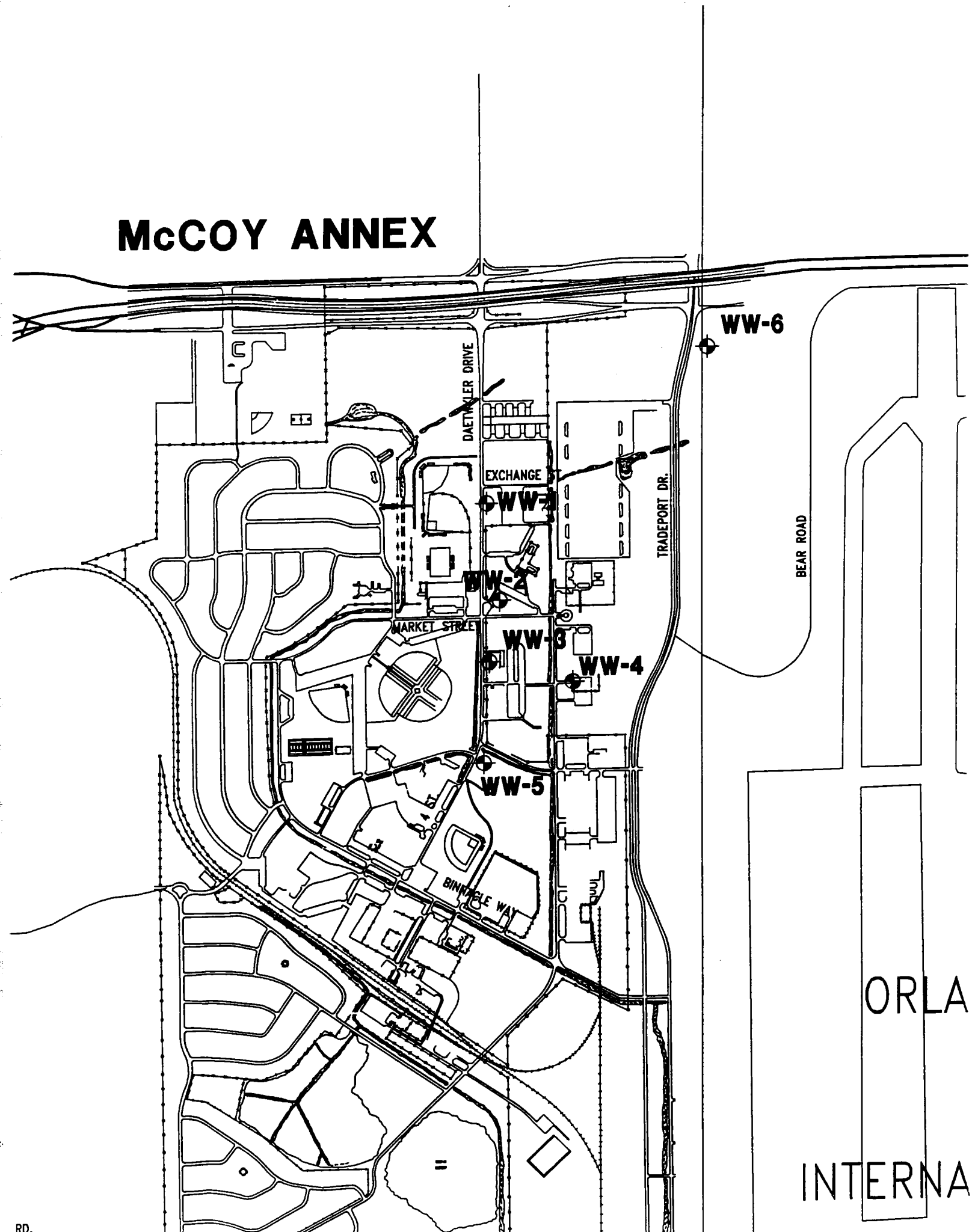
Manuel Alonso, P.G.
Senior Geologist

John Nash
Geologist

MA/JN/lak
Enclosure

cc: John Kaiser (ABB-ES) w/attachment
File w/attachment


LAKE
Belle Isle
Bear Head Lake
Lake Warren
BM 94
BM 96
BM 92
Tower
ORLANDO
McCoy Annex
INTERNATIONAL
AIRPORT
Beacon
Taft
(BM 97)
29
28
30
31
32
33
5
6
7
8
9
4


McCOY ANNEX
WW-6
DAETWILER DRIVE
EXCHANGE
WW-1
TRADEPORT DR.
BEAR ROAD
WW-2
MARKET STREET
WW-3
WW-4
WW-5
BINNACLE WAY
ORLA
INTERNA
RD.

Bldg 7107

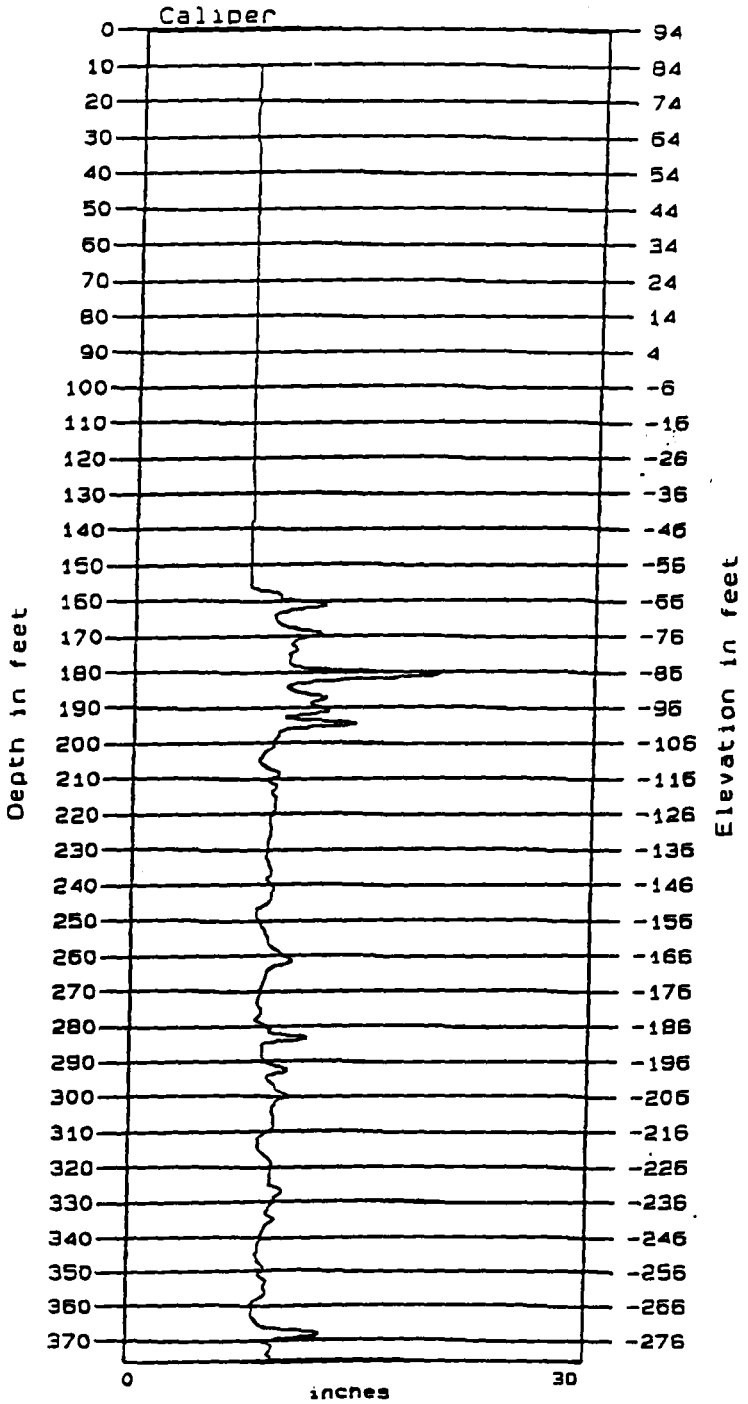
GEOPHYSICAL LOGS FOR WELL OR0655

Log Source: St. Johns River Water Management District

Station Name:	County: ORANGE	Date Logged:
Well ID: OR0655	Latitude: 28D 26M 36S	Depth Logged: 376 ft.
FGS ID:	Longitude: 81D 20M 20S	Cased Depth:
Other ID:	Elevation: 94 ft.	Water Level: ft.
Owner:	Topo Quad: PINE CASTLE	Date Measured:

Logs Available: CAL

Caliper Log 6/27/97



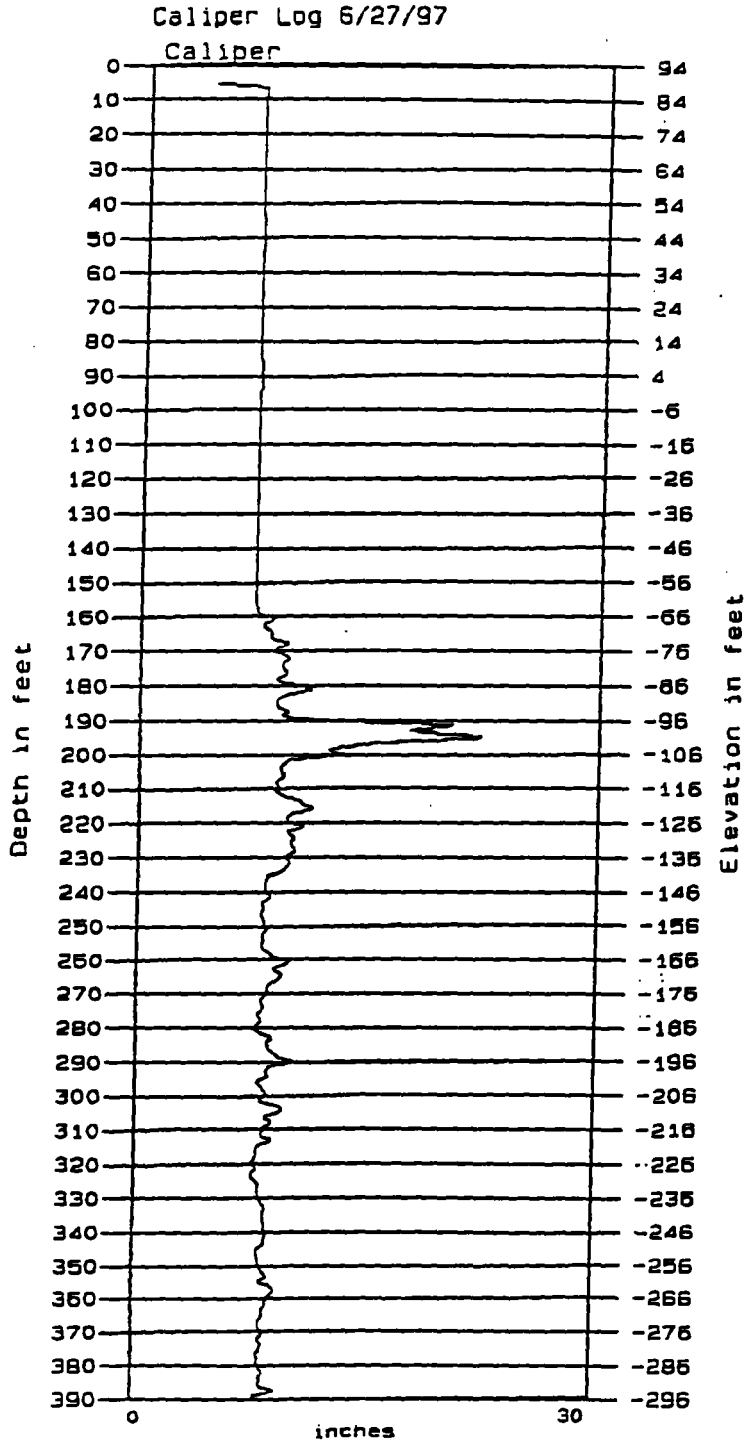
Bldg 511

GEOPHYSICAL LOGS FOR WELL OR0654

Log Source: St. Johns River Water Management District

Station Name:	County: ORANGE	Date Logged:
Well ID: OR0654	Latitude: 28D 26M 33S	Depth Logged: 390 ft.
FGS ID:	Longitude: 81D 20M 20S	Cased Depth:
Other ID:	Elevation: 94 ft.	Water Level: ft.
Owner:	Topo Quad: PINE CASTLE	Date Measured:

Logs Available: CAL



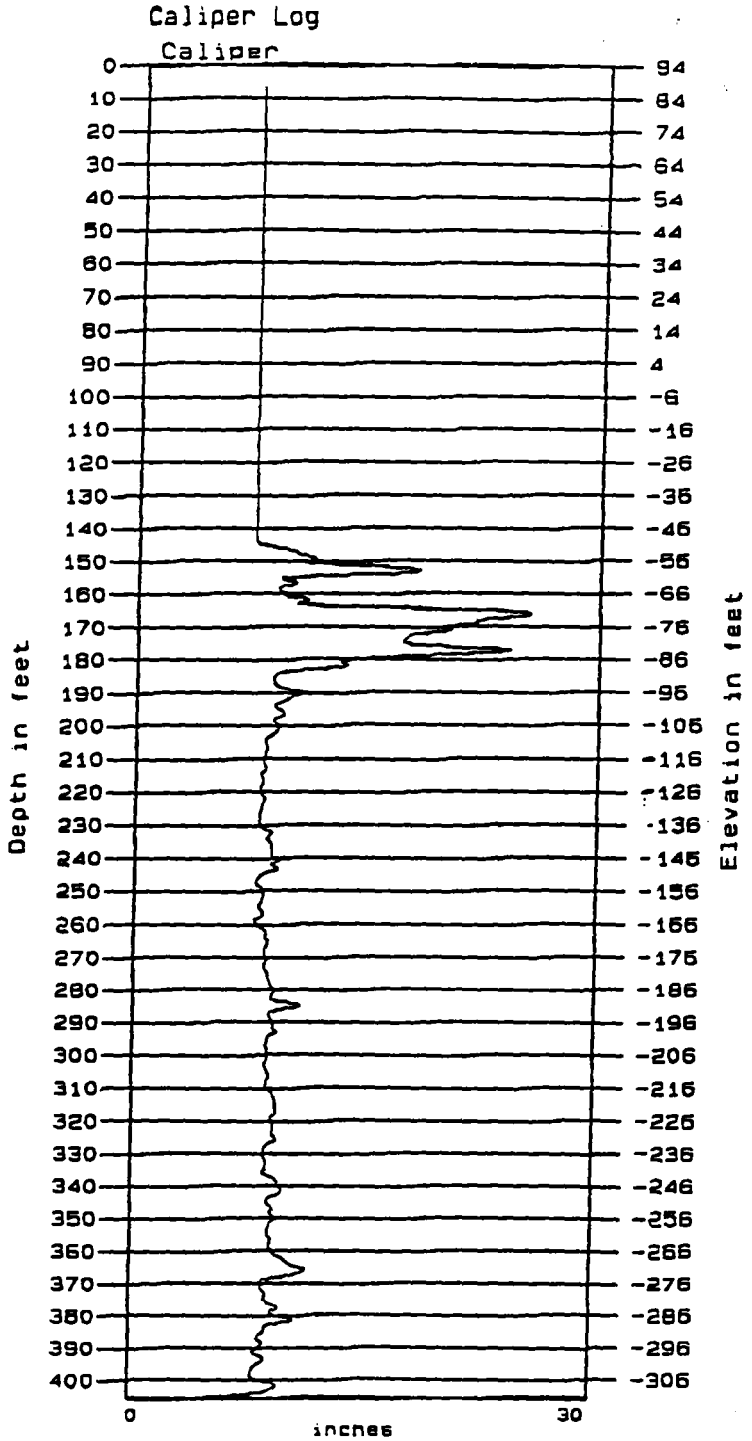
Bldg 7149

GEOPHYSICAL LOGS FOR WELL OR0653

Log Source: St. Johns River Water Management District

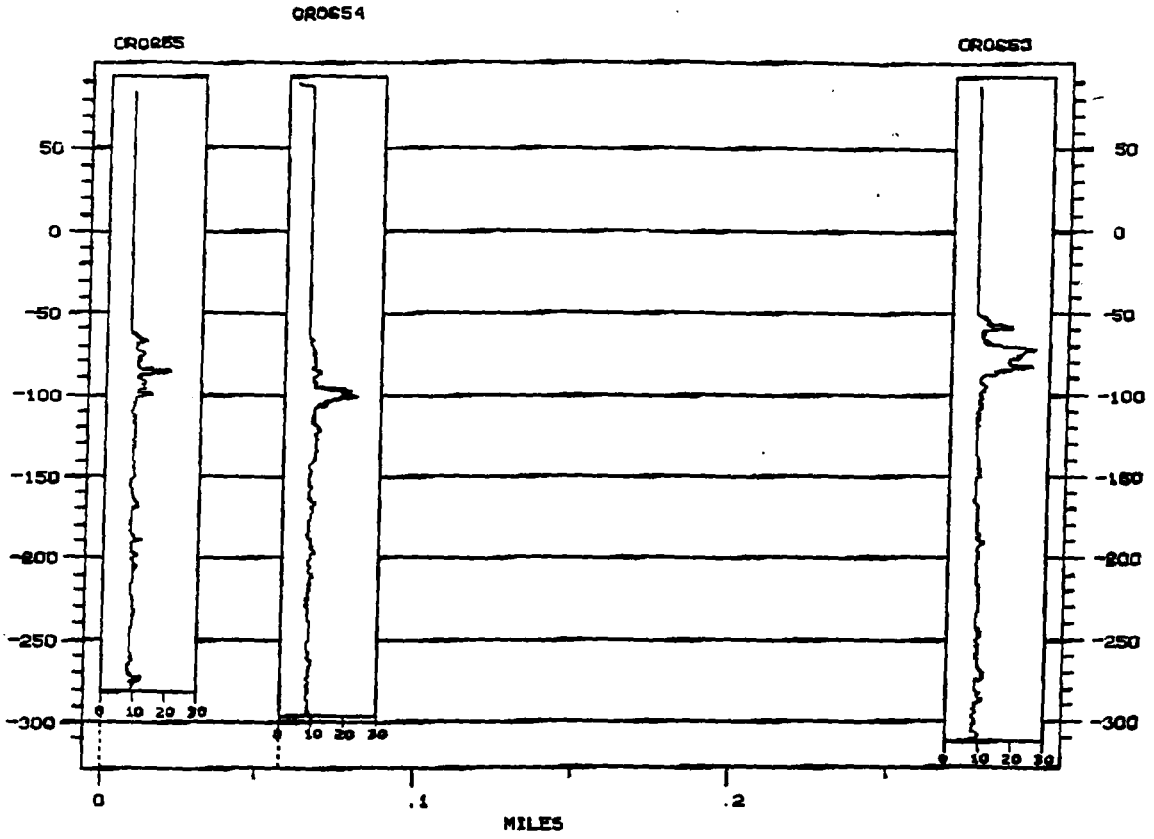
Station Name:	County: ORANGE	Date Logged:
Well ID: OR0653	Latitude: 28D 26M 22S	Depth Logged: 405.5 f
FGS ID:	Longitude: 81D 20M 20S	Cased Depth:
Other ID:	Elevation: 94 ft.	Water Level: ft.
Owner:	Topo Quad: PINE CASTLE	Date Measured:

Logs Available: CAL



Shifted for elevation

Caliper Logs 6/27/97



ATTACHMENT E

South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045
TDD (561) 697-2574

CON 24-06

August 11, 1997

PERMITTEE
U.S. NAVY, NAVAL TRAINING CENTER
1350 GRACE HOPPER AVENUE
ORLANDO, FL 32813

CONTRACTOR
SMITH, WAYNE D.
330 G. WINSTON CREEK PARKWAY
LAKELAND, FL 33809
LICENSE NO:9179

WATER WELL ABANDONMENT PERMIT # SFO80897L
EXPIRATION DATE: February 11, 1998

PROJECT: NAVAL TRAINING CENTER WELL #1 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: ORANGE SEC: 32 TWP: 23 RGE: 30

WELL ABANDONMENT SPECIFICATIONS:	INNER	OUTER
CASING DIAMETER:	8"	
CASING DEPTH:	157.00'	
SCREENED INTERVAL:	-	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	375.00'	
GROUT REQUIREMENT:		

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Jeffrey Rosenfeld, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit
c: MR. FRANK HUTTNER-DEP

NAVAL TRAINING CENTER WELL #1 ABANDONMENT
August 11, 1997

ABANDONMENT REQUIREMENTS

THIS WELL MUST BE PUMPED FROM BOTTOM TO TOP WITH NEAT CEMENT GROUT USING A TREMIE PIPE.

COMPLETION REPORT REQUIRED

A Water Well Completion Report (Form 0124) must be filed with the District within 30 days of completion of work.

ADDITIONAL CONDITIONS OF PERMIT

South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045
TDD (561) 697-2574

CON 24-06

August 11, 1997

PERMITTEE
U.S. NAVY, NAVAL TRAINING CENTER
1350 GRACE HOPPER AVENUE
ORLANDO, FL 32813

CONTRACTOR
SMITH, WAYNE D.
330 G. WINSTON CREEK PARKWAY
LAKELAND, FL 33809
LICENSE NO:9179

WATER WELL ABANDONMENT PERMIT # SF080897M
EXPIRATION DATE: February 11, 1998

PROJECT: NAVAL TRAINING CENTER WELL #2 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: ORANGE SEC: 32 TWP: 23 RGE: 30

WELL ABANDONMENT SPECIFICATIONS:	INNER	OUTER
CASING DIAMETER:	8"	
CASING DEPTH:	160.00'	
SCREENED INTERVAL:	-	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	390.00'	
GROUT REQUIREMENT:		

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Jeffrey Rosenfeld, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit
c: MR. FRANK HUTTNER-DEP

NAVAL TRAINING CENTER WELL #2 ABANDONMENT
August 11, 1997

ABANDONMENT REQUIREMENTS

THIS WELL MUST BE PUMPED FROM BOTTOM TO TOP WITH NEAT CEMENT GROUT USING A TREMIE PIPE.

COMPLETION REPORT REQUIRED

A Water Well Completion Report (Form 0124) must be filed with the District within 30 days of completion of work.

ADDITIONAL CONDITIONS OF PERMIT

South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045
TDD (561) 697-2574

CON 24-06

August 11, 1997

PERMITTEE
U.S. NAVY, NAVAL TRAINING CENTER
1350 GRACE HOPPER AVENUE
ORLANDO, FL 32813

CONTRACTOR
SMITH, WAYNE D.
330 G. WINSTON CREEK PARKWAY
LAKELAND, FL 33809
LICENSE NO:9179

WATER WELL ABANDONMENT PERMIT # SFO80897N
EXPIRATION DATE: February 11, 1998

PROJECT: NAVAL TRAINING CENTER WELL #5 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: ORANGE SEC: 32 TWP: 23 RGE: 30

WELL ABANDONMENT SPECIFICATIONS:	INNER	OUTER
CASING DIAMETER:	8"	
CASING DEPTH:	144.00'	
SCREENED INTERVAL:	-	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	405.00'	
GROUT REQUIREMENT:		

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Jeffrey Rosenfeld, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit
c: MR. FRANK HUTTNER-DEP

NAVAL TRAINING CENTER WELL #5 ABANDONMENT
August 11, 1997

ABANDONMENT REQUIREMENTS

HIS WELL MUST BE PUMPED FROM BOTTOM TO TOP WITH NEAT CEMENT GROUT USING A TREMIE PIPE.

COMPLETION REPORT REQUIRED

A Water Well Completion Report (Form 0124) must be filed with the District within 30 days of completion of work.

ADDITIONAL CONDITIONS OF PERMIT

WELL COMPLETION REPORT
FORM 0124
Rev. 11/90

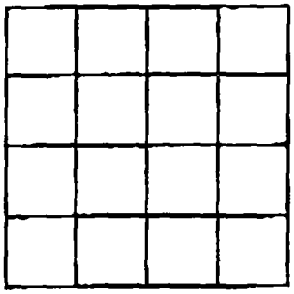
WELL PERMIT NO. [illegible]
SFWMD WATER USE PERMIT NO. _____

US Navy 1350 Grace Hopper Ave Orlando FL 32813
Owner Address City State Zip

[illegible] 9179 81797 1
Contractor's Signature License No. Completion Date Casing Depth Total Depth Well #

TYPE OF WORK: Construct ( ) Repair ( ) Abandon (X)
WELL USE: Domestic Well ( ) Public ( ) Monitor (X) Test ( )
Irrigation ( ) Fire Well ( ) Other _____
METHOD: Rotary with MUD ( ) or Air ( ), Cable Tool ( ), Jet ( )
Casing Driven ( ), Other [illegible]
STATIC WATER LEVEL _____ Ft. below top of casing
PUMPING WATER LEVEL _____ Ft. after _____ Hrs. at _____ GPM
PUMP SIZE _____ H.P. CAPACITY _____ GPM
PUMP TYPE _____ INTAKE DEPTH _____
From top of ground

LOCATION
Located Near Naval Training Center
County Orange
32 23 30
¼ ¼ Section Township Range
Latitude-Longitude


LOCATE IN SECTION

Cuttings sent to District? ( ) Yes ( ) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout Thickness & Depth	Casing & Screen Diameter & Depth	Depth (ft) From	Depth (ft) To	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
				Abandonment
				1-9"x375' well
				524 sks grout
Number of bags				

Casing: Black Steel (X) Galv. ( ) PVC ( ) Fiberglass ( )
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives Neat
Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )
Conductivity _____ Chlorides _____ mg/l

WELL COMPLETION REPORT
FORM 0124
Rev. 11/90

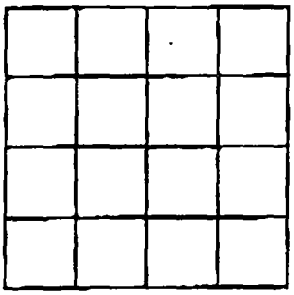
WELL PERMIT NO. SF 0808477 M
SFWMD WATER USE PERMIT NO. ____

US Navy 1350 Grace Hopper Ave Orlando FL 32813
Owner Address City State Zip

Contractor's Signature License No. 9179 Completion Date 81797 Casing Depth Total Depth Well # 2

TYPE OF WORK: Construct ( ) Repair ( ) Abandon (X)
WELL USE: Domestic Well ( ) Public (X) Monitor ( ) Test ( )
Irrigation ( ) Fire Well ( ) Other ____
METHOD: Rotary with MUD ( ) or Air ( ), Cable Tool ( ), Jet ( )
Casing Driven ( ), Other ____
STATIC WATER LEVEL ____ Ft. below top of casing
PUMPING WATER LEVEL ____ Ft. after ____ Hrs. at ____ GPM
PUMP SIZE ____ H.P. CAPACITY ____ GPM
PUMP TYPE ____ INTAKE DEPTH ____ From top of ground

LOCATION
Located Near Naval Training Center
County Orange
32 23 30
¼ ¼ Section Township Range
Latitude-Longitude


LOCATE IN SECTION

Cuttings sent to District? ( ) Yes ( ) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout Thickness & Depth	Casing & Screen Diameter & Depth	Depth (ft) From	Depth (ft) To	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
				Abandonment
				1-8" x 390'
				575 sks grout
Number of bags				

Casing: Black Steel (X) Galv. ( ) PVC ( ) Fiberglass ( )
Screen: Type ____ Slot size ____
Screened from ____ (ft.) to ____ (ft.)
Type of grout with % additives Neat
Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )
Conductivity ____ Chlorides ____ mg/l

WELL COMPLETION REPORT
FORM 0124
Rev. 11/90

WELL PERMIT NO. 5+ 0X0084+N
SFWMD WATER USE PERMIT NO. _____

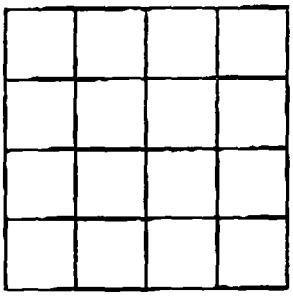
US Navy 1350 Grace Hopper Ave Orlando FL 32813
Owner Address City State Zip

Contractor's Signature 9179 08/7/97
License No. Completion Date

Casing Depth Total Depth Well #

TYPE OF WORK: Construct ( ) Repair ( ) Abandon (X)
WELL USE: Domestic Well ( ) Public ( ) Monitor (X) Test ( )
Irrigation ( ) Fire Well ( ) Other _____
METHOD: Rotary with MUD ( ) or Air ( ), Cable Tool ( ), Jet ( )
Casing Driven ( ), Other Tremie
STATIC WATER LEVEL _____ Ft. below top of casing
PUMPING WATER LEVEL _____ Ft. after _____ Hrs. at _____ GPM
PUMP SIZE _____ H.P. CAPACITY _____ GPM
PUMP TYPE _____ INTAKE DEPTH _____
From top of ground

LOCATION
Located Near Naval Training Center
County Orange
32 23 30
¼ ¼ Section Township Range
Latitude-Longitude



LOCATE IN SECTION

Cuttings sent to District? ( ) Yes ( ) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout Thickness & Depth	Casing & Screen Diameter & Depth	Depth (Ft) From	Depth (Ft) To	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
				Abandonment
				1-8" x 405'
				435 SKS grout
Number of bags				

Casing: Black Steel (X) Galv. ( ) PVC ( ) Fiberglass ( )
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives Neat
Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )
Conductivity _____ Chlorides _____ mg/l